

Sidebands

The Newsletter of the EAST GREENBUSH AMATEUR RADIO ASSOCIATION



www.egara.club

November 2017

President - Tom Scorsone, KC2FCP
Secretary - Steve VanSickle, WB2HPR

Vice-President - Ridge Macdonald, KB2HWL
Treasurer, Webmaster & Newsletter Editor - Bryan Jackson, W2RBJ

ARRL Chief Tackles Challenges Facing Ham Radio

League CEO Tom Gallagher Outlines League Strategies During Local Visit

The bad news is interest in Amateur Radio has continued to decline. The good news is ARRL is investing heavily in research and making significant changes designed to revitalize it.

"The basic problem we're facing is that we license 30,000 new hams a year but only about half *ever* get on the air," said ARRL CEO Tom Gallagher, NY2RF, during a packed meeting sponsored by the Troy Amateur Radio Association that was held October 17th at the Green Island Village Hall.

**"We License
30,000 new
hams a year,
but only about
half *ever* get
on the air."**

"The obvious question to ask was 'why?' So we began doing a lot of research, including gathering new data and reanalyzing old research we had. Then we starting sending out surveys and making telephone calls to new hams who were inactive. The response was 'I don't know how to get on the air... I haven't got a clue. I got my license, but that doesn't tell me how to get on the air.'"

Gallagher said many new hams said they had gone to a local amateur radio club but felt they had not learned anything or had much interaction with the members. He added that the research also found that about 17 percent of new hams joined ARRL but dropped their membership within a year. He said when new hams were asked why they had quit the League they said it was because they found

QST, the League's magazine, contained little information to help them get on the air -- either because the content didn't address their needs or because they didn't understand the technical articles or how they applied to them.

- continued on page 9 -



Neighboring VEs Visit EGARA

Two Volunteer Examiners from clubs in Massachusetts and Vermont took time to travel to East Greenbush to meet with several VEs from EGARA during the licensing session held on October 7th at the East Greenbush Community Library.

The visitors included Will Brinker, K1WMB (far right), who serves as VE liaison for the Northern Berkshire Amateur Radio Club, and Ron Wonderlick, AC1CX (3rd from left) from Bennington, Vermont, a VE who is a member of several clubs in the region.

In This Issue

Page 1 - ARRL CEO Pays a Visit / VE Visitors
Page 2 - Mini-Hamfest Photo Gallery
Page 3 - Hams Keep Puerto Rico in Touch
Page 4 - Ham, ham, Amateur, amateur??
Page 6 - October Meeting Minutes / Ham It Up
Page 7 - On the Beam - News & Notes
Page 8 - EGARA Supports Race for Hope
Page 10 - Calendar / Buy, Swap, Sell / Pro Tip

Members of EGARA attending the session included (l to r): Peggy Donnelly, KD2LMU, Bill Leue, K2WML, Tom Scorsone, KC2FCP, Dave Williams, N2VLQ, and Steve VanSickle, WB2HPR. Also in attendance was Bryan Jackson, W2RBJ.



Next EGARA Club Meeting - November 8, 2017 at 7 pm. See you there!

EGARA Mini-Hamfest Gallery

EGARA's annual Mini-Hamfest was held Wednesday, October 11th at the Masonic Temple with a number of local hams turning out to sell and buy gear -- and to catch up with each other. A wide range of items were offered, including transceivers, amps, antennas, coax -- and even a few freebies!

Here's a gallery highlighting the night and the hams who stopped by.



Welcome New Member WA2LVA!

Bob Stanley of Rensselaer stopped by the Mini-Hamfest to both check out the bargains and to join EGARA. Bob holds an Amateur Extra and is a member of ARRL. Please welcome him as the club's newest member!



Ham Radio Operators Aid Puerto Rico One Transmission at a Time

No gas. No food. No power. Puerto Ricans fear their future

Story courtesy of CNN

The phone call from the Red Cross came in late Friday night, just as the full scale of Hurricane Maria's calamity began taking shape.

"We need 50 of your best radio operators to go down to Puerto Rico."

In the days after the worst storm in three generations hit the American island -- and for many more to come -- public electrical, land-line and cellular communication systems showed few signs of life. And radio networks used routinely by police officers, power company workers and other first responder still were down.

Yet, a key mode of communication -- one not reliant on infrastructure vulnerable to strong winds and flooding -- still crackled: the "ham" radio.

Answering the phone that night in Connecticut was the emergency manager for the American Radio Relay League, the group's CEO said. For more than a century, this group has served as a hub for amateurs licensed to operate the dependable, if archaic, medium known as ham radio and eager to pitch in when disaster strikes.

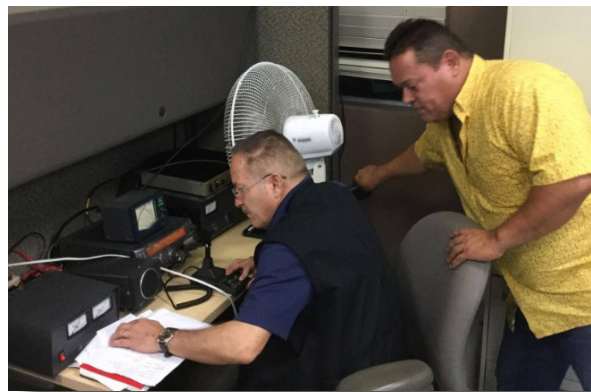
When the Red Cross made its latest appeal for heroes, these were the people it had in mind.

Jumping to respond to disaster

Already gearing up on his own that night to go to work, turning knobs and flipping switches, was Oscar Resto.

As one of dozens of ham -- shorthand for "amateur" -- operators across Puerto Rico, Resto had been authorized by the Federal Communications Commission to use radios, computers, satellites or the Internet to assist and support public safety during emergencies.

Often untethered from wires and cables, operators share information by voice, Morse code and other methods on a wide range of frequencies above the AM broadcast band. Such communications were critical during rescue operations after the 9/11 attacks and Hurricane Katrina.



Oscar Resto works with another volunteer to pass along information at the Red Cross headquarters in San Juan, Puerto Rico.

For three days after Maria hit, Resto sawed through the downed trees that separated his home from the road, he told CNN. Then he packed his car with radio gear, left his family and made the 25-mile journey to a makeshift Red Cross headquarters, where generators and batteries could power his equipment.

"I have the responsibility to establish the required emergency communications that the American Red Cross needed for understanding the needs of the citizens impacted by the hurricane," said Resto, a section manager for the American Radio Relay League, which boasts 160,000 members.

Survivors needed food, water, shelter and fuel to power generators after Maria knocked out the entire electrical grid. They also needed to communicate, to share critical information about diabetics nearing the end of their insulin reserves, babies threatened by dehydration, families rationing crackers.

Transmitting radio signals to other ham operators in the Caribbean, Resto and his shortwave brethren traded National Hurricane Center reports on Maria's position. He also contacted a ham operator in Florida, and asked "just to tell my daughter, Astrid, that we were fine," he recalled.

Before long, Resto and his compatriots realized their messages were the only ones getting off the island.

In an instant, their mission expanded: Anyone with the requisite skills and equipment was conscripted.

- continued on page 5 -

HAM? HAM radio? ham radio? Amateur Radio? amateur radio!

By Dan Romanchik, KB6NU

On the ARRL PR mailing list, we've been discussing the proper way to refer to amateur radio. What brought this up was an email from one list subscriber, Richard, WB6NAH, who was (rightfully) proud of the work that his club -- the Skagit Amateur Radio Emergency Communications Club -- was doing. He noted that they were even featured in the police department's emergency preparedness brochure. The brochure referred to "HAM radio" and "HAM radio operators."

Referring to amateur radio in this way just drives me crazy. "Ham radio" is just a nickname for amateur radio, and "HAM" is certainly not an acronym for anything. I congratulated Richard on getting his club included in the brochure, but noted, "...it's not HAM radio! It's either 'amateur radio' or 'ham radio' (ham is not an acronym). I hate to be nitpicky about this, but as a professional writer, this usage just drives me crazy." He replied, "I agree on Amateur Radio, that was the city's call."

That kicked off the discussion.

One ham replied to me privately, "Thank you...I am continually trying to explain that it is not an acronym or abbreviation."

Another replied to the list:

"The most correct term is "amateur radio" or alternatively "ham radio", both written in normal case. If using "ham radio", it is a best practice to first write "amateur (ham) radio" in the first non-header/non-title occurrence.

"Some will write "Amateur Radio" in proper noun format (first letters in caps) and while this may be acceptable to many and in certain venues, anyone using a style handbook will say it is incorrect. Less correct is to write "Ham Radio" in proper noun format as this is a slang term, albeit a popular one. Of course either term may be written as proper nouns when part of a title or name of an organization.

"Least correct is to write "HAM" in all caps; as stated by others, ham is not an abbreviation or acronym. Writing it as "HAM" is completely wrong, will drive many people bonkers, and should be avoided at all costs."

Ward, N0AX, offered this explanation:

"To clarify where the capitalization originated, there is a long-standing ARRL Board Directive, decades old, stipulating that the words "Amateur Radio" be capitalized in ARRL publications and documents. Most non-amateur publications return it to the lower-case style that is used for non-proper nouns."

One guy got a little miffed that we were wasting our time discussing this at all:

"You know, I've been reading this thread and I think people are getting too hung up on very minor details. The bottom line they got PR. So something wasn't spelled right or capitalized, so what. The message got out and IMHO that's the bottom line. Let's not waste any more bandwidth on this."

I agreed that it was great that they were included in the brochure, and that we were probably beating this topic to death, but I don't think these are minor details. I said that PR professionals pride themselves on getting the details right. So should amateur radio PR people.

I'll give the final word to Dan, AI4GK. He wrote:

"I don't think that standardizing what we call ourselves qualifies as getting hung up on minor details. If we don't have a standardized way of referring to us, how can we expect a public, who already is confused, to understand who we are?"

I don't think that you can argue with this. Let's avoid confusion by using "amateur radio" when writing about our hobby/service. I'd even urge the ARRL to rethink their use of "Amateur Radio." Sometimes, it may be OK to use "ham radio," but it's just not correct to use "HAM radio" or just "HAM."

About the Author: Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides and blogs about amateur radio at KB6NU.Com. When he's not picking nits about the name of our hobby, he teaches ham radio classes and operates CW on the HF bands. You can email him at cwgeek@kb6nu.com.



Amateur Radio Keeps Puerto Rico in Touch

-continued from page 3-

Shoulder to shoulder with first responders

Two ham volunteers, Raul Gonzalez and Jose Santiago, set up a radio control hub run by generator power in Monacillo, near San Juan, and other centers quickly followed suit. There, ham operators work shoulder to shoulder with public safety and utility officials to transmit information to other ham operators working with teams in the field.

Puerto Rico governor: Power could be out for months

A full week after Maria battered their homes, Resto and two dozen other Puerto Rican ham operators were still running radio operations for the police and the local power company, whose own wireless communications systems rely in part on computers and power sources knocked out by the storm.

For instance, ham operators riding with police use radios tuned to the special broadcast frequencies to transmit calls to other ham operators hunkered down at the command centers with officers, who in turn respond with orders.

A power company generator low on fuel? A ham operator from Resto's team deployed with the power company calls his counterpart at the command center and coordinates a fuel delivery.

Raul Gonzalez and Jose Santiago work to maintain the communication infrastructure they set up between ham radio operators in the Monacillo Control Center.

Raul Gonzalez and Jose Santiago work to maintain the communication infrastructure they set up between ham radio operators in the Monacillo Control Center.

For his part, Resto learned Tuesday via a ham radio at the command center that an unsanitary hospital in western Puerto Rico was transferring patients to another hospital. It was just one of countless threads of information squawked across the operational frequencies in a massive effort to deliver relief and supplies.

"I am very proud of them," Resto said of his crew of amateurs. "They are the real heroes."

More help on the way

Less than 48 hours after the American Radio Relay League's emergency manager fielded the Red Cross' call, over 350 ham operators had offered to help, according to Tom Gallagher, the group's CEO.

Fifty of them prepared this week to embark upon a three-

week deployment to Puerto Rico. They include retired executives and public safety officers, and hail from places from Washington to Texas to New Hampshire, he said.

"It's an incredibly personal sacrifice from individuals who are dedicated to serving communities," Gallagher said. "They have the skills and the motivation and the sense of responsibility."

Volunteers will deploy to the island with equipment kits so they can be agile and provide for themselves.

Volunteers will be outfitted with self-sustaining kits provided by radio manufacturers and dealer partners so they can be agile and won't burden those they're trying to help, he said.

Southwest Airlines was due to transport the equipment for free from the group's New York headquarters to Atlanta, where volunteers planned to convene Thursday to board a chartered JetBlue flight for San Juan, Gallagher said.

There, they plan to connect with the Red Cross and likely spread out across Puerto Rico to continue the life-saving work of radio operators already well underway, Gallagher said.

"It's the first time they've asked us to do this on this scale," he said. "This is why we're here."



"Ham Aid" kits provided by the ARRL have been sent to Puerto Rico help restore communications until traditional telecommunication systems can be repaired

EGARA October Meeting Minutes

- The regular membership meeting was held on Wednesday, October 11th as the annual Mini-Hamfest with free admission for buyers and sellers. There was no regular business conducted and no reports were made by the officers.
- Prior to the Mini-Hamfest, officers of the club met with officers of the East Greenbush Masonic Temple to discuss the club's responsibilities for building and lawn maintenance in return for use of the building at no charge. Those in attendance included club President Tom Scorsone, Vice President Ridge Macdonald and Treasurer Bryan Jackson.
- The club provided the Masons with a list of its responsibilities, including:

Inside – every month:

Empty trash receptacles and remove trash for off-site for disposal
Clean and restock bathrooms
Sweep and mop Kitchen
Sweep and mop first floor meeting hall
Reset tables and chairs as necessary
Sweep front vestibule, rear entryway and hallway
Sweep/vacuum second floor meeting and ancillary rooms
Dust furniture in second floor meeting room
Dust crevices for cobwebs with pole duster
Keep club equipment storage area in basement neat and organized

Outside – as necessary

Mow grass – front, rear, sides
Trim around sign, bushes
Leaf blow as necessary
Trim bushes along driveway
Clean storage shed
Maintain tractor and mower: tires, oil, gas, blades
Blow debris away from front steps, rear entry, and furnace exhaust discharge piping as necessary

- The members of the Masons' committee indicated they were pleased with the arrangement and the club's maintenance of the building and grounds. The meeting marked the beginning of the club's 15th year of this cooperative agreement.
- The meeting with the Masons adjourned at 6:55 pm. The Mini-Hamfest concluded at approximately 8:50 pm.

Ham It Up



The Votes Are In!

EGARA's Holiday Party
will be at
Moscatiello's Italian Restaurant
99 N Greenbush Rd, Troy
6 pm - December 13th

On the Beam

News & Notes

Antenna Parity Act Threatened Again by Lone U.S. Senator

The Amateur Radio Parity Act of 2017 continues to be threatened by a single lawmaker in the Senate, despite overwhelming support in both houses of Congress. The proposal would guarantee amateurs the right to install a usable antenna in areas where they are now barred by homeowner associations or similar deed restrictions. Although the bill was passed by the House in January, it remains blocked by Senator Bill Nelson (D-FL) of Florida. Senators Roger Wicker (R-MS) and Richard Blumenthal (D-CT) are the Senate sponsors.

"Amateur Radio continues to be a critical part of our emergency communications operations," Wicker said. "Mississippians learned firsthand after Hurricane Katrina how Amateur Radio operators can provide a resilient, distributed network to first responders and disaster relief organizations when other communication tools fail."

"Amateur Radio operators provide an invaluable service to their communities by assisting local emergency communication efforts when disasters occur and main lines are down," Blumenthal added. "This bipartisan measure ensures that operators have access to the tools they need to support our first responders when lives are at stake."

FCC Chairman Ajit Pai applauded the bill in late January, saying that it would "help Amateur Radio operators, and take several steps to promote public safety."

The bill has enjoyed widespread, bipartisan support. The legislation, which strikes a carefully crafted balance for all concerned parties, is the result of months of work culminating in the accord reached by ARRL and the Community Associations Institute (CAI). The measure provides for the guarantee of an effective outdoor antenna while protecting the aesthetic concerns of HOAs.

According to ARRL Hudson River Division Chief Mike Lisenco, N2YBB, Senator Nelson recently indicated that he would introduce amendments to the bill that would basically gut the protections being sought for amateur operators who now face antenna restrictions. In response, the ARRL agreed with the Senate sponsors to withhold the bill from further action until additional information in support of the legislation could be given to members of the committee that is reviewing the measure.



ARRL Hudson Division Chief Mike Lisenco, N2YBB, provided an update on the Parity Act during the TARA meeting on October 17th

Amateurs Asked to Stay Clear of Frequencies Designated for Ongoing Puerto Rico-Caribbean Emergency Response

The ARRL has reminded Amateur Radio operators that emergency communications are taking place on and around 14.265, as well as other frequencies designated for operations in Puerto Rico and the Caribbean. These include those being used by the Caribbean Emergency and Weather Net (CEWN) -- 7.188 and 3.815 MHz. The net is handling critical traffic and needs interference-free channels. Hams are requested to avoid these frequencies to allow for emergency communications to transpire clearly and efficiently.

If you must be on the air in the vicinity of these frequencies, please allow emergency operators at least 2 or 3 KHz on each side. As always, amateurs should monitor all frequencies before operating on them in case they are being used for emergency communications.

The League extended its thanks to amateur operators for their consideration of those fellow Amateur Radio operators who are doing important work in Puerto Rico and the Caribbean. Because of the extensive damage done to traditional communication systems in the region, these HF frequencies are likely to remain dedicated for emergency use for a significant period of time.

EGARA Volunteers Support Race for Hope

Despite gloomy and damp weather, EGARA volunteers were on hand again this year to provide communications for the annual "Race for Hope." The 5K event supports grants to not-for-profit organizations and programs serving uninsured and under-insured patients who are experiencing a financial hardship related to a brain, head, or neck cancer in the greater Capital Region. Since 2009, the 5K Race for Hope has raised over \$200,000 -- all of which has been dedicated to those it serves since overhead costs are underwritten entirely by Capital Region Special Surgery.



Ridge Macdonald gives course location assignments to EGARA volunteers prior to the start of the race

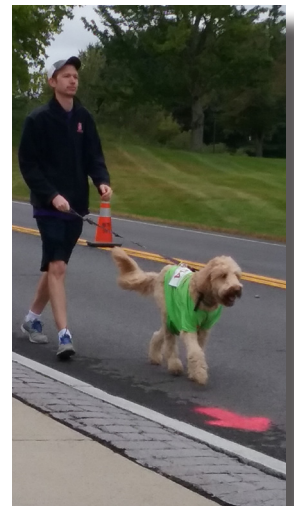
The race supports many local organizations, including the Ronald McDonald House Charities of the Capital Region, the Charles R. Wood Cancer Center at Glens Falls Hospital, the Ellis Hospital Foundation, the Mollie Wilmot Radiation Oncology Center located at Saratoga Hospital, and the patient services program at the St. Peter's Hospital Cancer Care Center.



Matthew Guidarelli of Albany finishes the Race for Hope first with a time of 19:31

Although the weather was less than cooperative, the race attracted 164 runner to the course in Slingerlands. This year's winner was 28 year old Matthew Guidarelli of Albany who finished the run with a time of 19:31. He was followed by 28 year old Sarah Anderson of Loudonville who clocked in at 22:27. The youngest top finisher was 8 year old Nicholas Scheid of Slingerlands. She recorded a time of 23:48.

Coordination for the event was handed by club Vice President Ridge Macdonald, KB2HWL with assistance from Treasurer Bryan Jackson, W2RBJ. Other members of the communications team were: Peter Mattice, KD2JKV; Peggy Donnelly, KD2LMU; Bill Leue, K2WML; Walt Snyder, N2WJR]; Russ Greenman, WB2LXC; Dave Wilkinson, KD2CDH; and Tim Mooney.



Even a canine or two turned out for the race

ARRL -- A League of Our Own

If you're not a member of the ARRL you're missing out! For just \$49 a year you'll receive a wide range of great benefits that are available to members only. They include ARRL's monthly magazine, QST, which is chock full of helpful information, including construction projects, amateur radio news, operating tips and much, much more. You'll also have access to Members-Only Web Services, Member Discounts, Ham Radio Equipment Insurance Plan, Outgoing QSL Service, Continuing Education, ARRL-sponsored contests, Operating Awards and support of your local club, EGARA. Plus, ARRL represents the interests of Amateur Radio at both the state and federal government levels.

For EGARA to remain an ARRL sanctioned club, at least 51% of our members also need to be members of ARRL. In return, EGARA receives many benefits, including ARRL merchandise for our Hamfest prizes, Field Day support and the ability to hold FCC licensing sessions. So if you're not already a member, please consider joining today. It's an investment in your hobby, your club -- and yourself!



ARRL Chief Tackles the Challenges Ahead

-continued from page 1-

"The implications are pretty serious if this trend continues," said Gallagher. "Who's going to buy radios? What equipment manufacturers are going to design new stuff? Who's going to advertise? Who are you going to talk to? What will happen to our community and ARRL?"

In response, Gallagher said the League is undertaking several new projects, including a new prototype publication called "*On the Air*" which is being sent out to a random sample of about 5,000 hams for review and critique.

"It's a publication designed specifically for new hams -- to get them from license, to active, to on-the-air, and then hopefully become members of ARRL" he said. He added that it has still to be decided if this new content will be published as a magazine, part of QST or be made available electronically. "It's an expensive survey, but we think it's key to the future. Right now, most people who get QST don't read it and we've got to fix that."



Amateurs from EGARA and several other area clubs turned out to listen to ARRL Chief Tom Gallagher discuss the League's plans for boosting interest in Amateur Radio

In the meantime, the ARRL chief said the League has taken substantial steps to deal with its declining revenues, including cutting expenditures by \$750,000 a year. "The declines we've experienced are in line with the projections we made. But we expect the cost-saving steps we've taken to get us to a break-even or even positive cash position by the end of this year."

Gallagher said the League is also focusing on a strategy of developing a life-long learning program for hams. "We want to have a program that goes right from start-up to super-experienced ham. We want to put it out in every modality and media -- it will go out in books, online, for tablets, for smart phones -- because if it's not online or on an app you're not going to reach 30 and 40 year olds. It will take time to do, but that's what's coming out of this research."

Another area that is drawing the League's focus is college students. Funding provided by the Synder Family Foundation is being used to revitalize amateur radio programs at some 500 colleges and universities across the nation. "It's a very, very good program that's well supported and we've left it up entirely to the college kids -- they don't want to hear it from me as to how to build an organization. We've also found that young people don't want to be taught by people who are much older than they are. They want to be taught by their peers. My own mentor when I was starting out was exactly my age -- he just knew a hell of a lot more than I did. And he was able to convey it to me and also convey the confidence I needed to do it."

In reviewing the research, Gallagher said it also looked at why people want to become hams. "The number one answer was that they want to participate in disaster preparedness and emergency communications," he said. "Forty nine percent said that's the reason why they got their license." However, he noted that until recently there had not been many disasters requiring the aid of Amateur Radio, leaving many hams to lose interest, as well as being unprepared to handle emergency communications. "We have to attack this issue of emergency communications and emergency communications training, and integrate it with our life-long learning and our new ham programs."

Gallagher said that the role of amateurs in disaster response is also changing, especially in urban areas where there are substantial numbers of professional first responders and where communication systems have been "hardened" over the past few years to withstand disasters. "We know that's the case in places like Palm Beach and New York -- they're the professionals and they don't want to talk to us," he said. So we have to find a different role for ourselves." As a result, he said new and expanded partnerships have been formed with organizations such as the Red Cross and the Salvation Army.

As an example, he pointed to the hurricane that devastated Puerto Rico. "We got a call from the Red Cross at 10:30 pm the Friday night after the storm asking if we could pull together 50 experienced amateur operators to go down to Puerto Rico for three weeks," Gallagher said. "Within two days we had 450 volunteers. Next we called DX Engineering and they overnighted us 25 transceivers, power supplies and tuners." According to Gallagher, Jet Blue Airlines flew the 50 selected hams to Atlanta and then on to Puerto Rico for free. While their initial mission was to relay health and welfare information back to the mainland, it was soon expanded to include coordination of emergency medical supplies, power restoration, and the release of water from overflowing reservoirs. "You have to be very proud of these people. They showed that hams can be very versatile in their skills and that they can work under awful conditions."

However, in summing up his view on the future of amateur radio, Gallagher said much depends on its ability to change with the times.

"We have to listen to what new hams want," Gallagher concluded. "If we tell them they're going to have to enjoy Amateur Radio the way we did years ago, they're simply going to say, 'No, thank you.'"

CALENDAR

November 8, 2017 - EGARA Membership meeting, 7 pm, East Greenbush Masonic Temple, 710 Columbia Turnpike, East Greenbush, NY, 7 pm.

December 13, 2017 - EGARA Annual Holiday Party, 6 pm at Moscatiello's Italian Restaurant, 99 N Greenbush Road, Troy

May 12, 2018 - EGARA Hamfest 2018 - 8 am to 1 pm at the East Greenbush Fire Department.



For Sale

- **Kenwood TS-480 Hf Rig** – 200 w PEP output, w/ manual, cable, and microphone – like new - \$700 obo; Contact: Steve Van Sickle, WB2HPR, by phone at 326-0902.

Looking to Buy, Sell or Swap?
 Send your info to W2RBJ@outlook.com

ProTip:

Use the RF gain control effectively



It's easy to overlook the RF gain control, but it can be another tool you can use to more quickly get stations into the log.

With most radios, adjusting the RF gain control down results in an increase in the S-meter indication. In the presence of fading on a signal, you can adjust the RF gain just to the point where you can still hear your signal, but the S-meter is steady, with no fluctuations. At this point, any effects of AGC on the signal should be minimal, and your copy should improve. Some operators even turn OFF their AGC to dig for the really weak ones on relatively quiet bands, preferring to manually control the gain using the RF Gain control.

In noisy bandy conditions you can reduce RF gain, thereby reducing overall noise levels, which can help to decrease operator fatigue.

Santa Says:

Don't Forget!

December 13th at 6 pm

**It's EGARA's Annual
Holiday Party**

**Moscatiello's Italian Restaurant
99 N Greenbush Rd, Troy**

The East Greenbush Amateur Radio Association

Organized in 1998, by Bert Bruins, N2FPJ, (Silent Key) and Chris Linck, N2NEH, the East Greenbush Amateur Radio Association, an ARRL affiliate, is committed to providing emergency services, educational programs, and operating resources to the amateur radio operators and residents of the Capital Region of New York State. The club station is W2EGB. The club also has several VHF and UHF repeaters open to club members and the public.